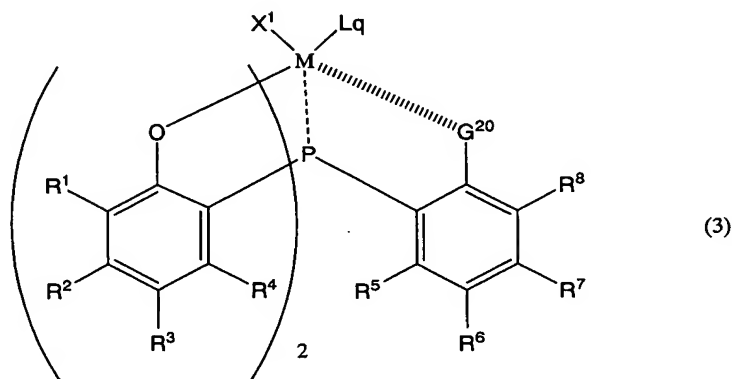


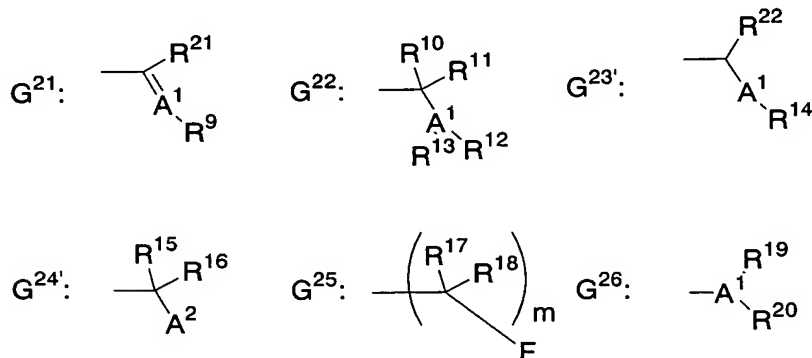
ABSTRACT

The invention provides a transition metal complex of formula (3) below:



wherein R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , R^7 and R^8 are the same or different and each independently represents a hydrogen atom, a halogen atom or a substituted or unsubstituted alkyl group having 1 to 10 carbon atom(s); R^5 represents a hydrogen atom, a fluorine atom or a substituted or unsubstituted alkyl group having 1 to 10 carbon atom(s); X^1 represents a hydrogen atom, a halogen atom or a substituted or unsubstituted alkyl group having 1 to 10 carbon atom(s); L represents a balancing counter ion or neutral ligand similar to X^1 that is bonding or coordinating to metal M; and q represents an integer of 0 or 1, and

G^{20} represents any one of G^{21} to G^{26} below:



where A^1 represents an element of Group 15 of the periodic

table, wherein A^1 in G^{23} represents an anion of an element of Group 15 of the periodic table, and A^1 in G^{21} represents a nitrogen atom;

5 $R^9, R^{14}, R^{12}, R^{13}, R^{19}, R^{20}, R^{10}, R^{11}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}$ and R^{22} each independently represents,

a hydrogen atom; or

a substituted or unsubstituted alkyl groups having 1 to 10 carbon atom(s), and

10 the line linking M and R^{20} represents that M is coordinated or linked to an element of Group 15 or 16 of the periodic table or to a fluorine atom constituting R^{20} .